

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
TEXARKANA DIVISION**

MAXELL, LTD.,

*Plaintiff,*

v.

ZTE USA INC.,

*Defendant.*

Case No. 5:16-cv-00179-RWS

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**FINAL JURY INSTRUCTIONS**

**1. Introduction**

**MEMBERS OF THE JURY:**

It is my duty and responsibility to instruct you on the law you are to apply in this case. The law contained in these instructions is the only law you may follow. It is your duty to follow what I instruct you the law is, regardless of any opinion that you might have as to what the law ought to be.

If I have given you the impression during the trial that I favor either party, you must disregard that impression. If I have given you the impression during the trial that I have an opinion about the facts of this case, you must disregard that impression. You are the sole judges of the facts of this case. Other than my instructions to you

on the law, you should disregard anything I may have said or done during the trial in arriving at your verdict.

You should consider all of the instructions about the law as a whole and regard each instruction in light of the others, without isolating a particular statement or paragraph.

The testimony of the witnesses and other exhibits introduced by the parties constitute the evidence. The statements of counsel are not evidence; they are only arguments. It is important for you to distinguish between the arguments of counsel and the evidence on which those arguments rest. What the lawyers say or do is not evidence. You may, however, consider their arguments in light of the evidence that has been admitted and determine whether the evidence admitted in this trial supports the arguments. You must determine the facts from all the testimony that you have heard and the other evidence submitted. You are the judges of the facts, but in finding those facts, you must apply the law as I instruct you.

You are required by law to decide the case in a fair, impartial, and unbiased manner, based entirely on the law and on the evidence presented to you in the courtroom. You may not be influenced by passion, prejudice, or sympathy you might have for the plaintiff or the defendant in arriving at your verdict.

## **1.1 No Inference from Filing Suit**

The fact that a plaintiff brought a lawsuit in this Court seeking damages creates no inference that the plaintiff is entitled to a judgment. Anyone may make a claim and file a lawsuit. The act of making a claim in a lawsuit, by itself, does not in any way tend to establish that claim and is not evidence.

## **1.2 Direct and Circumstantial Evidence**

Some of you may have heard the terms “direct evidence” and “circumstantial evidence.” Direct evidence is simply evidence like the testimony of an eyewitness which, if you believe it, directly proves a fact. Circumstantial evidence is simply a chain of circumstances that indirectly proves a fact. If someone walked into the courtroom wearing a raincoat covered with drops of water and carrying a wet umbrella, that would be circumstantial evidence from which you could conclude that it was raining.

It is your job to decide how much weight to give the direct and circumstantial evidence. As a general rule, the law makes no distinction between the weights that you should give to direct and circumstantial evidence, nor does it say that one is any better evidence than the other, but simply requires that you find the facts from all the evidence, both direct and circumstantial, and give it the weight you believe it deserves.

### **1.3 Expert Witnesses**

When knowledge of a technical subject matter may be helpful to the jury, a person who has special training or experience in that technical field is permitted to state his or her opinion on those technical matters. He or she is called an expert witness. However, you are not required to accept that opinion. As with any other witness, it is up to you to decide whether the witness's testimony is believable or not, whether it is supported by the evidence, and whether to rely upon it. In deciding whether to accept or rely upon the opinion of an expert witness, you may consider any bias of the witness.

### **1.4 Deposition Testimony**

Certain testimony in this case has been presented to you through a deposition. A deposition is the sworn, recorded answers to questions asked of a witness in advance of the trial. Under some circumstances, if a witness cannot be present to testify from the witness stand, the witness's testimony may be presented under oath in the form of a deposition. Sometime before this trial, attorneys representing the parties in this case questioned this witness under oath. A court reporter was present and recorded the testimony. You should judge the credibility of and weigh the importance of deposition testimony to the best of your ability just as if the witness had testified in court in person.

This deposition testimony is entitled to the same consideration and is to be judged by you as to the credibility and weight and otherwise considered by you insofar as possible the same as if the witness had been present and had testified from the witness stand in court.

## **2. Summary of Contentions**

To help you follow the evidence, I will now give you a summary of the positions of the parties. The parties in this case are Maxell Ltd. and ZTE (USA) Inc. The case involves seven United States Patents, which are referred to as “Asserted Patents,” and certain claims of those patents, which are referred to as “Asserted Claims.”

Maxell contends that ZTE USA infringes the following claims by making, using, selling, offering for sale, and/or importing into the United States certain ZTE products. Specifically, Maxell contends that ZTE USA:

- a. literally infringes claim 1 of the '193 Patent;
- b. literally infringes claims 1–3 of the '317 Patent;
- c. literally infringes claim 5 of the '493 Patent;
- d. literally infringes claim 1 of the '729 Patent;
- e. literally infringes claims 1 and 8 of the '491 Patent;
- f. literally infringes claim 1 of the '695 Patent; and

- g. infringes claims 1–2 of the '794 Patent literally and under the doctrine of equivalents.

Maxell also contends that ZTE USA has committed infringement willfully.

Maxell is seeking damages for the alleged infringement of ZTE USA.

ZTE USA contends that it does not infringe any of the Asserted Claims. ZTE USA contends that it has not infringed any asserted claim of the Asserted Patents. ZTE USA further contends that:

- a. Claims 1–3 of the '317 Patent are invalid as anticipated by prior art under 35 U.S.C. § 102;
- b. Claims 1–3 of the '317 Patent are invalid for failing to claim patent-eligible subject matter under 35 U.S.C. § 101;
- c. Claim 1 of the '193 Patent is invalid as obvious in view of prior art under 35 U.S.C. § 103; and
- d. Claims 1–2 of the '794 Patent are invalid for failing to claim patent-eligible subject matter under 35 U.S.C. § 101.

ZTE contends that Maxell is not entitled to any damages award, under any theory, including a reasonable royalty theory. ZTE USA contends that Maxell's claims for damages are barred in whole or in part for failure to mark licensed products with the patent in compliance with 35 U.S.C. § 287. ZTE USA contends

that, if it is found to infringe any asserted claim, no such infringement has been willful.

Your job is to decide whether ZTE USA has infringed the asserted claims, and whether the asserted claims are invalid. If you decide that any asserted claim has been infringed and is not invalid, you will then need to decide the amount of money damages to be awarded to Maxell to compensate Maxell for the infringement, if any.

You will also need to make a finding as to whether the infringement was willful. If you decide that any infringement was willful, that decision should not affect any damages award you make. I will take willfulness into account later.

## **2.1 Representative Products**

For purposes of this case, the parties agree that certain products are representative of other products. That means that proof of infringement or non-infringement of a representative product shall be treated as proof for the other products that it represents. Specifically, for the purposes of infringement or non-infringement, the following products are representative, and proof of infringement or non-infringement about the following products is proof for the products they each represent:

- a. The ZMax 2 with pre-installed AT&T Navigator is representative of products accused of infringing the '317 Patent;
- b. The ZMax 2 is representative of products accused of infringing the '193

Patent and the '794 Patent;

- c. The ZMax 2 is representative of products accused of infringing the '491 Patent, except for the Axon 7;
- d. The Zmax 2 is representative of products accused of infringing the '695 Patent, except the Axon 7;
- e. The Max Duo LTE is representative of products accused of infringing the '729 Patent, except for the Axon 7; and
- f. The Max Duo LTE is representative of products accused of infringing the '493 Patent, except for the Axon 7.

A complete list of accused products by patent is included as Appendix B to these Jury Instructions.

### **3. Burdens of Proof**

Facts must be proved by a required standard of evidence known as the burden of proof. You've heard about it, I'm sure, from television and probably in criminal cases with reference to proof beyond a reasonable doubt. That does not apply in a civil case like this. In a patent case like this one, there are two burdens of proof that you will apply: The preponderance of the evidence standard and the clear and convincing evidence standard.

Maxell must prove its claims of patent infringement, willfulness, marking and damages by a preponderance of the evidence. When a party has the burden of proof



by a preponderance of the evidence, it means that you must be persuaded that what the party seeks to prove is more likely so than not so. If you put the evidence for and against the party who must prove the fact on opposite sides of the scale, the preponderance of the evidence requires that the scale tip somewhat toward the party who has the burden of proof.

Now, ZTE USA has the burden of proving invalidity of the patent claims by clear and convincing evidence. That means evidence that produces in your mind a firm belief or conviction as to the truth of the matter at issue. Although proof to a certainty is not required, the clear and convincing standard requires a greater degree of persuasion than is necessary for the preponderance of the evidence standard.

#### **4. Claims of the Patents-in-Suit**

The claims of a patent are the numbered sentences at the end of the patent. The claims describe the invention made by the inventor and describe what the patent owner owns and what the patent owner may prevent others from doing. Claims may describe products, methods and apparatus such as machines or chemical compounds, or processes for making or using a product.

The claims are important because it is the words of the claims themselves that define what a patent covers. The figures and text in the rest of the patent provide a description and/or examples of the invention and provide a context for the claims, but it is the claims that define the breadth of the patent's coverage. Each claim is

effectively treated as if it were a separate patent, and each claim may cover more or less than another claim. Therefore, what a patent covers depends upon what each of its claims cover.

You will first need to understand what each claim covers in order to decide whether or not there is infringement of the claim and to decide whether or not the claim is invalid. The law says that it's my role to define the terms of the claims, and it's your role to apply these definitions to the issues that you are asked to decide in this case.

Therefore, as I explained to you at the start of the case, I have determined the meaning of certain claim terms at issue in this case and I have provided you those definitions in Appendix A. You must accept the definitions of these words in the claims as being correct. It is your job to take these definitions and apply them to the issues that you are deciding, including infringement and validity. The claim language I have not interpreted for you is to be given its ordinary and accustomed meaning as understood by one of ordinary skill in the art.

#### **4.1 Level of Ordinary Skill**

In deciding what the level of ordinary skill is in the field of each claimed invention, you should consider all the evidence introduced at trial, including but not limited to: (1) the levels of education and experience of the inventor and other persons actively working in the field; (2) the types of problems encountered in the

field; (3) prior art solutions to those problems; (4) rapidity with which innovations are made; and (5) the sophistication of the technology.

## **4.2 How a Patent Claim Defines What It Covers**

I will now explain how a patent claim defines what it covers. A claim sets forth, in words, a set of requirements. Each claim sets forth its requirements in a single sentence. If a device or system satisfies each of these requirements, then it is covered by the claim. In patent law, the requirements of a claim are often referred to as “claim elements” or “claim limitations.”

When a thing (such as a feature, product, process, or system) meets all of the requirements of a claim, the claim is said to “cover” that thing, and that thing is said to “fall” within the scope of that claim. In other words, a claim covers a feature, product, process, or system where each of the claim elements or limitations is present in that feature, product, process, or system. Conversely, if the feature, product, process, or system meets only some, but not all, of the claim elements or limitations, then that feature, product, process, or system is not covered by the claim.

By understanding the meaning of the words in a claim and by understanding that the words in a claim set forth the requirements that a product must meet in order to be covered by that claim, you will be able to understand the scope of coverage for each claim. Once you understand what each claim covers, then you are prepared to

decide the issues that you will be asked to decide, such as infringement and invalidity.

### **4.3 Independent and Dependent Claims**

This case involves two types of patent claims: independent claims and dependent claims.

An “independent claim” sets forth all of the requirements that must be met in order to be covered by that claim. Thus, it is not necessary to look at any other claim to determine what an independent claim covers. In this case, for example, claim 1 of the ’317 Patent is an independent claim.

Other claims in the case are “dependent claims.” A dependent claim refers to another claim and includes all the requirements or parts of the claim to which it refers. In this case, for example, claim 2 of the ’317 Patent depends from claim 1. In this way the claim “depends” on another claim. The dependent claim then adds its own, additional requirements. To determine what a dependent claim covers, it is necessary to look at both the dependent claim and any other claims to which it refers. A feature, product or method that meets all of the requirements of both the dependent claim and the claims to which it refers is covered by that dependent claim.

### **4.4 Claim Interpretation**

I will now explain to you the meaning of some of the words of the claims in this case. In doing so, I will explain some of the requirements of the claims. As I

have previously instructed you, you must accept my definition of these words in the claims as correct. Those definitions are provided for you in Appendix A . For any words in the claim for which I have not provided you with a definition, you should apply their common meaning. You should not take my definition of the language of the claims as an indication that I have a view regarding how you should decide the issues that you are being asked to decide, such as infringement and validity. These issues are yours to decide.

For some constructions I refer to the structure required by the term as being described in a portion of the patent identified by column and line number, and/or in a Figure of the patent. Those are what we call means plus function terms. I will explain those now.

#### **4.5 “Means-plus-function” Claims**

Asserted Claim 1 of the '491 Patent and Asserted Claim 1 of the '794 Patent have limitations phrased as a “means for” performing a function. This “means for” phrase has a special meaning in patent law. It is called a “means-plus-function” requirement. These limitations do not cover all of the structures that could perform the functions set forth in the claim. Instead, each such limitation covers a structure or a set of structures that performs that function and that is either identical or “equivalent” to the structure(s) described in the patent for performing that function. The issue of whether two structures are identical or equivalent is for you to decide.

I will explain to you later how to determine whether two structures or two sets of structures are “equivalent” to one another

For purposes of this case, I have identified for you the structures described in the '491 Patent and '794 Patent that perform the various functions recited in the asserted claims. These are listed in Appendix A along with the other definitions for the different claim terms. When I read you my definitions for certain claim terms a few moments ago, I identified the structures described in the '491 Patent for performing the relevant functions. You should apply my definition of the function and the structures described in the '491 Patent for performing it as you would apply my definition of any other claim term.

## **5. Infringement**

Any person or business entity who makes, uses, sells, offers to sell, or imports into the United States a product or practices a method that is covered by at least one claim of a patent infringes the patent. A patent owner has the right to stop others from making, using, selling and offering for sale, and importing into the United States the invention covered by the patent claims during the life of the patent.

### **5.1 Direct Infringement by “Literal Infringement”**

There are two types of “direct infringement”: (1) “literal infringement” and (2) “infringement under the doctrine of equivalents.”

In order to prove direct infringement by literal infringement, Maxell must prove that ZTE USA made, used, sold, offered for sale within, or imported into the United States an Accused Product that meets all of the requirements of an Asserted Claim and did so without the permission of Maxell during the time the patent-in-suit was in force. You must compare the Accused Product with each and every one of the requirements of a claim to determine whether all of the requirements of that claim are met.

You must determine, separately for each asserted claim, whether or not there is infringement. There is one exception to this rule. If you find that a claim on which other claims depend is not infringed, there cannot be infringement of any dependent claim that refers directly or indirectly to that independent claim. On the other hand, if you find that an independent claim has been infringed, you must still decide, separately, whether the accused product meets additional requirements of any claims that depend from the independent claim, thus, whether those claims have also been infringed. A dependent claim includes all the requirements of any of the claims to which it refers plus additional requirements of its own.

## **5.2 Direct Infringement by “Literal Infringement” of 35 U.S.C. Section 112, Paragraph 6 Claim Requirements**

As I have previously explained, Asserted Claim 1 of the '491 Patent and Asserted Claim 1 of the '794 Patent include requirements that are in means-plus-function form. A product or a process infringes the claim if: (1) it has a structure

that performs the identical function recited in the claim, and (2) that structure is either identical or “equivalent” to one or more of the described structures that I defined in Appendix A as performing the function. If the Accused Product does not perform the specific function recited in the claim, the “means-plus-function” requirement is not met, and the Accused Product does not literally infringe the claim. Alternatively, even if the Accused Product has a structure that performs the function recited in the claim but the structure is not either identical or “equivalent” to one or more of the structures that I defined in Appendix A, the Accused Product does not literally infringe the asserted claim. In order to prove direct infringement by literal infringement of a means-plus-function limitation, Maxell must prove the above requirements are met.

### **5.3 Direct Infringement Under the Doctrine of Equivalents**

If ZTE USA makes, uses, sells, offers to sell within, or imports into the United States an Accused Product that does not meet all of the requirements of a claim and thus does not literally infringe that claim, there can still be direct infringement if that Accused Product satisfies the claim “under the doctrine of equivalents.” Under the doctrine of equivalents, an Accused Product infringes a claim if the Accused Product contains elements or performs steps corresponding to each and every requirement of the claim that is equivalent to, even though not literally met by, the Accused Product. You may find that an element or step is equivalent to a requirement of a claim that



is not met literally if a person having ordinary skill in the field of technology of the patent would have considered the differences between them to be “insubstantial” or if you find that the structure or action: (1) performs substantially the same function and (2) works in substantially the same way (3) to achieve substantially the same result as the requirement of the claim. In order for the structure or action to be considered interchangeable, the structure or action must have been known at the time of the alleged infringement to a person having ordinary skill in the field of technology of the patent.

You may also consider whether, at the time of the alleged infringement, a person having ordinary skill in the field of technology of the patent would have known of the interchangeability of the alternative feature and the unmet requirement of the claim. Interchangeability at the present time is not sufficient proof of infringement under the doctrine of equivalents. In order for the structures to be considered interchangeable, the interchangeability of the two structures must have been known to persons of ordinary skill in the field of technology at the time the infringement began

#### **5.4 Preambles**

The beginning portion, or preamble of a claim is the portion of the claim prior to the word “comprises” or “comprising.” The Court’s Constructions in Appendix A include information about whether certain “preambles” are limiting. Where the

Court has made this determination, you must follow the Court's Construction. Where the Court has not indicated whether a preamble is limiting, then "comprising" and "comprises" mean "including but not limited to, "or "containing but not limited to." Thus, if you decide that an accused feature includes all the requirements in that claim, the claim is infringed. This is true even if the accused instrumentality includes components in addition to those requirements. For example, a claim to a table comprising a tabletop, legs, and glue would be infringed by a table that includes a tabletop, legs, and glue, even if the table also includes wheels on the table's legs.

## **5.5 Willful Infringement**

Maxell contends that ZTE USA willfully infringed the patents-in-suit. Willfulness requires you to determine whether Maxell proved that it is more likely than not that the infringement by Maxell was especially worthy of punishment. You may not determine that the infringement was willful just because ZTE USA knew of a patent and infringed it. Instead, willful infringement is reserved for only the most egregious behavior, such as where the infringement is malicious, deliberate, consciously wrongful, or done in bad faith. You must base your decision on ZTE USA's knowledge at the time of infringement.

To determine whether ZTE USA acted willfully for any of the patents-in-suit, consider all facts. These may include, but are not limited, to:

- a. Whether or not ZTE USA acted consistently with the standards of behavior for its industry;
- b. Whether or not ZTE USA intentionally copied a product of Maxell that is covered by a patent-in-suit;
- c. Whether or not ZTE USA reasonably believed it did not infringe;
- d. Whether or not ZTE USA made a good-faith effort to avoid infringing, for example, whether ZTE USA attempted to design around the patent;
- e. Whether or not ZTE USA tried to cover up its infringement; and
- f. Whether ZTE USA's reliance on an opinion of counsel as a defense to Maxell's allegations of willful infringement was reasonable.

Your determination of willfulness should incorporate the totality of the circumstances based on the evidence presented during this trial.

## **6. Invalidity**

I will now instruct you on the rules you must follow in deciding whether or not ZTE USA has proven that the Asserted Claims are invalid. Patent invalidity is a defense to patent infringement. Even though the Patent Office examiner has allowed the claims of a patent, you have the ultimate responsibility for deciding whether the claims of the patent are valid. For a patent claim to be valid, the invention claimed in the patent must be new, useful, and not obvious. A patent claim cannot take away from people their right to use what was known or what would have been obvious when the invention was made.

That which precedes the priority date of the patent invalidates, and that which comes after infringes. Claims are given the same meaning for purposes of validity and infringement.

An issued patent claim is accorded a presumption of validity based on the presumption that the experts at the United States Patent and Trademark Office acted correctly in issuing each claim of a patent. Each claim of a patent is presumed valid independently of the validity of the other claims. The presumption of validity remains intact and the burden of proof remains on the party challenging validity throughout this litigation. In other words, the burden never shifts to the patent owner to prove that its patent claims are valid.

I will now explain to you the rules that govern invalidity in detail. In making your determination as to invalidity, you should consider each claim and each ground for invalidity separately.

## **6.1 Prior Art**

That which came before a patent is generally referred to as the “prior art.” Prior art may include items that were publicly known or that have been used or offered for sale, or references, such as publications or patents, that disclose the claimed invention or elements of the claimed invention. To be prior art, the item or reference must have been made, known, used, published, or patented either before the priority date of the patent

## **6.2 Anticipation**

In order for someone to be entitled to a patent, the invention must actually be “new.” In general, inventions are new when the identical product has not been made, used, or disclosed before. Anticipation must be determined on a claim-by-claim basis.

ZTE (USA) Inc. contends that certain claims of the Asserted Patents are invalid because the claimed inventions are anticipated by prior art.

Here is a list of ways that ZTE (USA) Inc. can show that a patent claim was not new or that the patentee lost the right to patent the claims:

1. An invention is not new if it was known to or used by others in the United States before the priority date of invention. An invention is known when the information about it was reasonably accessible to the public on that date.
2. An invention is not new if it was already patented or described in a printed publication, anywhere in the world before the priority date of the patent. A description is a “printed publication” only if it was publicly accessible.
3. The inventor has lost its rights if the claimed invention was already patented or described in a printed publication, anywhere in the world by Maxell Ltd. or anyone else, more than a year before the priority date of the application for the Asserted Patent. An invention was patented by another if the other patent describes the same invention claimed by Maxell Ltd. to a person having ordinary skill in the technology.
4. An invention is not new if it was described in a published patent application filed by another in the United States or under the PCT system and designated the United States, and was published in English before the priority date of invention.
5. An invention is not new if the claimed invention was described in a patent granted on an application for patent by another filed in the United States or

under the PCT system and designated the United States, and was published in English and the application was filed before the date of reduction to practice or the filing date of the application for the Asserted Patent.

To understand how the prior art system operates, you may rely on multiple pieces of evidence that describe the same prior art system for the purpose of finding anticipation. In other words, if you find that a single prior art system existed that meets every element of the claim, then that is enough to find the claim invalid as anticipated.

### **6.3 Anticipation by a Printed Publication**

A patent claim is invalid if the invention defined by that claim was described in a printed publication anywhere in the world more than one year before the priority date of the asserted patent.

Printed publications may include issued patents as well as articles, treatises, and other written materials. A printed publication or patent will not be an anticipation unless it contains a description of the invention covered by the patent claims that is sufficiently detailed to teach a skilled person how to make and use the invention without undue experimentation. Factors to be considered in determining whether a disclosure would require undue experimentation include: (1) the quantity of experimentation necessary; (2) the amount of direction or guidance disclosed in the printed publication or patent; (3) the presence or absence of working examples in the printed publication or patent; (4) the nature of the invention; (5) the state of

the prior art; (6) the relative skill of those in the art; (7) the predictability of the art; and (8) the breadth of the claims.

A printed publication must be reasonably accessible to those members of the public who would be interested in its contents. It is not necessary that the printed publication be available to every member of the public. The date that a printed publication becomes prior art is the date that it becomes available to the public.

So long as the printed publication was available to the public, the form in which the information was recorded is unimportant. The information must, however, have been maintained in some permanent form, such as printed or typewritten pages, magnetic tape, microfilm, photographs, or photocopies.

#### **6.4 Obviousness**

Even though an invention may not have been identically disclosed or described before it was made by an inventor, in order to be patentable, the invention must also not have been obvious to a person of ordinary skill in the field of technology of the patent at the time the invention was made.

ZTE USA may establish that a patent claim is invalid by showing that the claimed invention would have been obvious to persons having ordinary skill in the art at the time the invention was made in the field of the invention.

In determining whether a claimed invention is obvious, you must consider the level of ordinary skill in the field of the invention that someone would have had at

the time the invention was made, the scope and content of the prior art, and any differences between the prior art and the claimed invention.

To understand how the prior art system operates, you may rely on multiple pieces of evidence that describe the same prior art system for the purpose of finding obviousness.

Keep in mind that the existence of each and every element of the claimed invention in the prior art does not necessarily prove obviousness. Most, if not all, inventions rely on building blocks of prior art. In considering whether a claimed invention is obvious, you may but are not required to find obviousness if you find that at the time of the claimed invention there was a reason that would have prompted a person having ordinary skill in the field of the invention to combine the known elements in a way the claimed invention does, taking into account such factors as:

1. whether the claimed invention was merely the predictable result of using prior art elements according to their known function(s);
2. whether the claimed invention provides an obvious solution to a known problem in the relevant field;
3. whether the prior art teaches or suggests the desirability of combining elements claimed in the invention;
4. whether the prior art teaches away from combining elements in the claimed invention;
5. whether it would have been obvious to try the combinations of elements, such as when there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions; and whether the change resulted more from design incentives or other market forces. To



find it rendered the invention obvious, you must find that the prior art provided a reasonable expectation of success. Obvious to try is not sufficient in unpredictable technologies.

In determining whether the claimed invention was obvious, consider each claim separately. Do not use hindsight. You must consider only what was known at the time of the invention.

In making these assessments, you should take into account any objective evidence (sometimes called “secondary considerations”) that may shed light on the obviousness or not of the claimed invention, such as:

- a. Whether the invention was commercially successful as a result of the merits of the claimed invention (rather than the result of design needs or market-pressure advertising or similar activities);
- b. Whether the invention satisfied a long-felt need;
- c. Whether others had tried and failed to make the invention;
- d. Whether others invented the invention at roughly the same time;
- e. Whether others copied the invention;
- f. Whether there were changes or related technologies or market needs contemporaneous with the invention;
- g. Whether the invention achieved unexpected results;
- h. Whether others in the field praised the invention;
- i. Whether persons having ordinary skill in the art of the invention expressed surprise or disbelief regarding the invention;
- j. Whether others sought or obtained rights to the patent from the patent holder; and

k. Whether the inventor proceeded contrary to accepted wisdom in the field.

### **6.5 Obviousness: Scope and Content of the Prior Art**

In considering whether the claimed invention was obvious, you must first determine the scope and content of the prior art. The scope and content of prior art for deciding whether the invention was obvious includes at least prior art in the same field as the claimed invention, regardless of the problem addressed by the item or reference, and prior art from different fields that a person of ordinary skill would have considered when trying to solve the problem that is addressed by the invention.

### **6.6 Eligibility**

ZTE contends that the elements of the following claims describe activities and/or components that were well understood to a person of ordinary skill in the art at the time of the priority dates of the patents: '317 patent claims 1–3 and '794 patent claims 1–2. You must decide if the elements in each of these claims taken individually or as a combination involve well-understood, routine, and conventional activity previously engaged in by researchers in the field, or well-understood, routine, and conventional activities or components previously known to the industry. Whether a particular technology was well-understood, routine, and conventional goes beyond what was simply known in the prior art. The mere fact that something was disclosed in a piece of prior art, for example, does not mean it was well understood, routine, and conventional.

## **7. Damages**

I will now instruct you about the measure of damages. By instructing you on damages, I am not suggesting which party should win this case, on any issue. If you find that ZTE USA infringed any valid claim of the patents-in-suit, you must then determine the amount of money damages to be awarded to Maxell to compensate it for that infringement. If you find that ZTE USA has not infringed any valid claim of the patent, then Maxell is not entitled to any damages.

If you award damages, they must be adequate to compensate Maxell for any infringement you find. You must not award Maxell more damages than are adequate to compensate for the infringement, nor should you include any additional amount for the purpose of punishing ZTE USA. Damages are not meant to punish an infringer or set an example. Your damages award, if you reach this issue, should put Maxell in approximately the financial position that it would have been in had the infringement not occurred.

While Maxell is not required to prove the amount of its damages with mathematical precision, it must prove them with reasonable certainty. You may not award damages that are speculative, damages that are only possible, or damages that are based on guesswork.

Maxell seeks patent damages in the form of a reasonable royalty. But, regardless of the type of damages you may choose to award, you must be careful to

ensure that the award is no more or no less than the value of the patented invention. The patent law does not allow you to use the value of an entire product or service, or the value of the entire market, to determine damages unless you find that Maxell has proven that the patented feature of the product drives consumer demand for the entire product or service.

### **7.1 Reasonable Royalty Definition**

A reasonable royalty is defined as the money amount the patent owner (not always Maxell in this case) and ZTE USA would have agreed in a hypothetical negotiation taking place at the time when infringement first began.

In considering this hypothetical negotiation, you should focus on what the expectations of the patent owner and ZTE USA would have been had they entered into an agreement at that time, and had they acted reasonably in their negotiations. Unlike in a real world negotiation, all parties to the hypothetical negotiation are presumed to believe that the patent was valid and infringed and that both parties were willing to enter into an agreement. The reasonable royalty you determine must be a royalty that would have resulted from the hypothetical negotiation, and not simply a royalty either party would have preferred. Evidence of things that happened after the infringement first began can be considered in evaluating the reasonable royalty only to the extent that the evidence aids in assessing what royalty would have resulted from a hypothetical negotiation. Although evidence of the actual profits an

alleged infringer made may be used to determine the anticipated profits at the time of the hypothetical negotiation, the royalty may not be limited or increased based on the actual profits the alleged infringer made.

### **7.3 Damages - Georgia-Pacific Factors**

In deciding what is a reasonable royalty that would have resulted from the hypothetical negotiation, you may consider the factors that the patent owner at the time and the alleged infringer would consider in setting the amount the alleged infringer should pay. I will list for you a number of factors you may consider. They are as follows:

1. The royalties received by the patentee for the licensing of the patent-in-suit, proving or tending to prove an established royalty
2. The rates paid by the licensee for the use of other patents comparable to the patent-in-suit.
3. The nature and scope of the license, as exclusive or nonexclusive, or as restricted or nonrestricted in terms of territory or with respect to whom the manufactured product may be sold.
4. The licensor's established policy and marketing program to maintain his or her patent monopoly by not licensing others to use the invention or by granting licenses under special conditions designed to preserve that monopoly.
5. The commercial relationship between the licensor and licensee, such as whether they are competitors in the same territory in the same line of business, or whether they are inventor and promoter.
6. The effect of selling the patented specialty in promoting sales of other products of the licensee, the existing value of the invention to the licensor as a generator of sales of his nonpatented items, and the extent of such derivative or convoyed sales.

7. The duration of the patent and the term of the license.
8. The established profitability of the product made under the patents, its commercial success, and its current popularity.
9. The utility and advantages of the patented property over the old modes or devices, if any, that had been used for working out similar results.
10. The nature of the patented invention, the character of the commercial embodiment of it as owned and produced by the licensor, and the benefits to those who have used the invention.
11. The extent to which the infringer has made use of the invention and any evidence probative of the value of that use.
12. The portion of the profit or of the selling price that may be customary in the particular business or in comparable business to allow for the use of the invention or analogous inventions.
13. The portion of the realizable profits that should be credited to the invention as distinguished from nonpatented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer.
14. The opinion and testimony of qualified experts.
15. The amount that a licensor (such as the patentee) and a licensee (such as the infringer) would have agreed upon (at the time the infringement began) if both had been reasonably and voluntarily trying to reach an agreement; that is, the amount which a prudent licensee—who desired, as a business proposition, to obtain a license to manufacture and sell a particular article embodying the patented invention—would have been willing to pay as a royalty and yet be able to make a reasonable profit and which amount would have been acceptable by a prudent patentee who was willing to grant a license.

No one factor is dispositive and you can and should consider the evidence that has been presented to you in this case on each of these factors. You may also consider any other factors which in your mind would have increased or decreased the royalty

the ZTE USA would have been willing to pay and the patent holder would have been willing to accept, acting as normally prudent business people.

#### **7.4 Damages - Date**

##### **A. Determine Whether Products Were Marked**

If you find that Maxell, or a previous owner of the Asserted Patent, or a licensee to the Asserted Patent sells or sold a product that practices the Asserted Patents, you must determine whether they “marked” that product with the Asserted Patent number. “Marking” is placing either the word “patent” or the abbreviation “pat.” with the patent’s number on substantially all of the Maxell or licensed products that practice the patented invention, if any exist.

Maxell must show that it substantially complied with the marking requirement in 35 U.S.C. § 287 by marking substantially all of the products it made, offered for sale, sold or imported, and which practiced the Asserted Patent, and by showing that previous owners of the Asserted Patent marked substantially all of the products they made, offered for sale, sold or imported that practiced the Asserted Patent, and by showing that Maxell and previous owners of the Asserted Patent made reasonable efforts to ensure that licensees who made, offered for sale, sold or imported products that practiced the Asserted Patent marked the products. Specifically, Maxell must show that the Casio G’z One Commando 4G LTE, Nikon Coolpix S800c and Nikon

Coolpix 810c cameras either do not practice the patented inventions, were not sold in the United States, or were marked.

**B. Determine Date of Commencement**

If you find that Maxell, or a previous owner of the Asserted Patent, or a licensee to the Asserted Patent sold a licensed product that practiced an Asserted Patent in the United States, and did not mark substantially all of the products it made, offered for sale, sold or imported under the Asserted Patent, then you must determine the date that Maxell or a previous owner of the Asserted Patent gave actual notice to ZTE USA of the Asserted Patent. “Actual notice” means that Maxell communicated to ZTE USA a specific charge of infringement of the Asserted Patent by a specific Accused ZTE Product or device. The filing of the complaint in this case qualifies as actual notice, so the damages period begins no later than the date the complaint was filed on November 18, 2016. If Maxell shows that ZTE USA did receive actual notice of an Asserted Patent prior to the date the complaint was filed, then the damages period begins on the date of the actual notice.

Damages commence on the date that ZTE USA has both infringed and been notified of the alleged infringement of the particular Accused Patent. In determining the amount of damages, you must determine when the damages began. The parties do not agree on that date, and it is up to you to determine what that date is for each Asserted Patent.



<b>Patent</b>	<b>Maxell Contends</b>	<b>ZTE USA Contends</b>
<u>'193 Patent</u>	November 18, 2016	November 18, 2016
<u>'695 Patent</u>	November 18, 2016	November 18, 2016
<u>'491 Patent</u>	November 18, 2016	November 18, 2016
<u>'493 Patent</u>	August 5, 2014	November 18, 2016
<u>'729 Patent</u>	August 5, 2014	November 18, 2016
<u>'317 Patent</u>	June 10, 2013	November 18, 2016
<u>'794 Patent</u>	August 5, 2014	November 18, 2016

### **7.5 Damages - Use of Non-Infringing Alternatives**

In determining a reasonable royalty, you may also consider evidence concerning the availability and cost of non-infringing alternatives to the patented invention. A non-infringing alternative must be an acceptable product that is licensed under the patent or that does not infringe the patent.

### **7.5 Damages - Apportionment for Royalty**

Damages for patent infringement must be apportioned to reflect the value the invention contributes to the accused products or features and must not include value from the accused products or features that is not attributable to the patent.

### **7.6 Instructions for Deliberations**

You must perform your duties as jurors without bias or prejudice as to any party. The law does not permit you to be controlled by sympathy, prejudice, or public opinion. All parties expect that you will carefully and impartially consider all the evidence, follow the law as it is now being given to you, and reach a just verdict, regardless of the consequences.

It is now your duty to deliberate and to consult with one another in an effort to reach a verdict. Each of you must decide the case for yourself, but only after an impartial consideration of the evidence with your fellow jurors. During your deliberations, do not hesitate to re-examine your own opinions and change your mind if you are convinced that you were wrong. But do not give up on your honest beliefs because the other jurors think differently, or just to finish the case.

Remember that in a very real way you are the judges of the facts. Your only interest is to seek the truth from the evidence in the case. All persons, including corporations, both foreign and domestic, stand equal before the law, regardless of size or who owns them or where they are located, and they are to be treated as equals.

Your verdict must be unanimous. When you retire to the jury room to deliberate on your verdict, you may take this charge with you as well as exhibits which the Court has admitted into evidence. Select your Foreperson and conduct your deliberations. If you recess during your deliberations, follow all of the instructions that the Court has given you about your conduct during trial. After you have reached your verdict, your Foreperson is to fill in on the verdict form your answers to the questions. Do not reveal your answers until such time as you are discharged, unless otherwise directed by me. After you have concluded your service and I have discharged the jury, you are not required to talk with anyone about the case.

Any notes that you have taken during this trial are only aids to memory. If your memory should differ from your notes, then you should rely on your memory and not on the notes. The notes are not evidence. A juror who has not taken notes should rely on his or her independent recollection of the evidence and should not be unduly influenced by the notes of other jurors. Notes are not entitled to any greater weight than the recollection or impression of each juror about the testimony.

If you want to communicate with me at any time, please give a written message or question to the Court Security Officer, who will bring it to me. I will then respond as promptly as possible either in writing or by having you brought into the courtroom so that I can address you orally. I will always first disclose to the attorneys your question and my response before I answer your question.

After you have reached a verdict, you are not required to talk with anyone about the case unless the Court orders otherwise. You may now retire to the jury room to deliberate.

## Appendix A

### Court's Claim Constructions

#### U.S. Patent No. 6,748,317

Claim Term	Court's Construction
"an input device for inputting a destination" (‘317 Patent, Claim 1)	Plain and ordinary meaning
"walking navigation" (‘317 Patent, Claim 1)	"information to navigate a user who is walking"

**U.S. Patent No. 6,408,193**

<b>Claim Term</b>	<b>Court's Construction</b>
“a cellular telephone adapted to be used in a CDMA system, comprising” (‘193 Patent, all asserted Claims)	The preamble is limiting as is described in the jury instructions.
“an encoder/decoder apparatus” (‘193 Patent, Claim 1)	Plain and ordinary meaning
“variable amplitude amplifier: (‘193 Patent, Claim 1)	“an amplifier whose output amplitude may be varied and that provides a variable gain in response to a control signal”
“open-loop power control” (‘193 Patent, Claim 1)	Plain and ordinary meaning
“closed-loop power control” (‘193 Patent, Claim 1)	Plain and ordinary meaning
“bias condition” (‘193 Patent, Claim 1)	“the bias voltage and/or current setting of the amplifier”

**U.S. Patent No. 6,816,491**

<b>Claim Term</b>	<b>Court's Construction</b>
“packetizing audio sequences which are compressed and encoded and by multiplexing a plurality of those sequences” (‘491 Patent, Claim 1)	“digitized audio data in packet form for transmission is compressed and encoded and by combining a plurality of the data”

Claim Term	Court's Construction
<p>“a demultiplexer for extracting the one audio data sequence which is designated by the user from said group of packets depending upon a property or attribute information which each packet has, and further for extracting a method of compression and encoding which is applied for compressing the audio data sequence from a header information which said each audio data sequence has”</p> <p>(‘491 Patent, Claim 1)</p>	<p>Plain and ordinary meaning</p>
<p>“a first memory”</p> <p>(‘491 Patent, Claim 1)</p>	<p>Plain and ordinary meaning</p>
<p>“a digital signal processor for decoding the compressed audio data sequences in accordance with said decoding program codes, sequentially”</p> <p>(‘491 Patent, Claim 1)</p>	<p>Plain and ordinary meaning</p>

Claim Term	Court's Construction
<p>“controller means for detecting change in said method of compression and encoding, and for transferring the decoding program code corresponding to the method of the compression and encoding after being changed, from said read-only memory to said first memory” (‘491 Patent, Claim 1)</p>	<p>This is a “means plus function” limitation under 35 U.S.C. § 112(6), as is described in the jury instructions.</p> <p><b>Function:</b> for detecting change in said method of compression and encoding, and for transferring the decoding program code corresponding to the method of the compression and encoding after being changed, from said read-only memory to said first memory</p> <p><b>Structure:</b> a CPU that is within the audio decoder apparatus, the CPU being external to the digital signal processor and the first memory (Figures 1, 6, 10, 11, 12, or 13) and being connected via a bus between a read only memory and the first memory, running the algorithm set forth in the flowcharts of Figure 4 and Figure 9 and the corresponding citations in the specification at 6:30-7:54 and 9:28-44, or equivalents thereof</p>
<p>Preamble of Claim 8 (‘491 Patent, Claim 8)</p>	<p>The preamble of claim 8 is not limiting.</p>
<p>“a demultiplexer for inputting one audio data sequence which is compressed and encoded, being selected from a plurality of audio data sequences which are multiplexed” (‘491 Patent, Claim 8)</p>	<p>Plain and ordinary meaning</p>

**U.S. Patent No. 8,098,695**

<b>Claim Term</b>	<b>Court's Construction</b>
Preamble (‘695 Patent, Claim 1)	The preamble is limiting as is described in the jury instructions.
“packetizing audio data sequences which are compressed and encoded and by multiplexing a plurality of those sequences” (‘695 Patent, Claim 1)	“digitized audio data in packet form is compressed and encoded and by combining a plurality of the data”
“a demultiplexer for extracting the one audio data sequence which is designated by the user from said group of packets depending upon a property or attribute information of each packet, and further for extracting a method of compression and encoding which is applied for compressing the audio data sequence from a header information of each data sequence” (‘695 Patent, Claim 1)	Plain and ordinary meaning
“a memory” (‘695 Patent, Claim 1)	Plain and ordinary meaning



Claim Term	Court's Construction
<p>“a controller for receiving a method of compression and encoding from said demultiplexer, for detecting whether said method of compression and encoding changes to another method of compression and encoding or not, and if said method of compression and encoding changes, for downloading the decoding program code corresponding to said another method of compression and encoding, to said memory from outside of said memory”</p> <p>(‘695 Patent, Claim 1)</p>	<p>Plain and ordinary meaning</p>
<p>“begins decoding processing”</p> <p>(‘695 Patent, Claim 1)</p>	<p>Plain and ordinary meaning</p>

**U.S. Patent No. 6,329,794**

<b>Claim Term</b>	<b>Court's Construction</b>
“function devices equipped with independent functions” (‘794 Patent, Claim 1)	This is a “means plus function” limitation under 35 U.S.C. § 112(6), as is described in the jury instructions.  <b>Function:</b> equipped with independent functions  <b>Structure:</b> modern devices, audio communication devices and videophone devices, or equivalents thereof
“capacity detector for detecting a remaining capacity of said battery” (‘794 Patent, Claim 1)	Plain and ordinary meaning
“controller for controlling operation of said function devices based on said remaining capacity” (‘794 Patent, Claim 1)	Plain and ordinary meaning
“Remaining capacity of said battery” (‘794 Patent, Claim 1)	“remaining charge stored in the battery”

**U.S. Patent No. 8,339,493**

<b>Claim Term</b>	<b>Court's Construction</b>
<p>“an image sensing device with a light receiving sensor having an array of pixels arranged vertically and horizontally in a grid pattern, in an N number of vertically arranged pixel signals”</p> <p>(‘493 Patent, Claim 5)</p>	Plain and ordinary meaning
<p>“a display unit with a display screen, that displays an image corresponding to the image signals”</p> <p>(‘493 Patent, Claim 5)</p>	Plain and ordinary meaning
<p>“an image-instability detector”</p> <p>(‘493 Patent, Claim 6)</p>	Plain and ordinary meaning
<p>“an image-instability of the electric camera”</p> <p>(‘493 Patent, Claim 6)</p>	Plain and ordinary meaning

**U.S. Patent No. 8,736,729**

<b>Claim Term</b>	<b>Court's Construction</b>
“an image sensing device having an array of pixels arranged vertically and horizontally in a grid pattern” (‘729 Patent, Claim 1)	Plain and ordinary meaning
“an image instability detector” (‘729 Patent, Claim 1)	“a detector, such as a gyroscopic sensor or the like, capable of detecting an image instability of the electric camera”
“an amount of image-instability of the camera” (‘729 Patent, Claim 1)	“an amount of instability caused by vertical and/or horizontal movement of the electric camera”
“a signal processing unit configured to form image signals” (‘729 Patent, Claim 1)	Plain and ordinary meaning
“to change a position of the second effective set of pixels according to the amount of image-instability detected by the image-instability detector, in order to correct the image-instability” (‘729 Patent, Claim 1)	“based on the converted pixel numbers, the position of an extracted area (effective pixel area) on the light receiving surface is shifted, in order to correct the image-instability”
“a display unit configured to display an image corresponding to the image signals formed by the signal processing unit” (‘729 Patent, Claim 1)	Plain and ordinary meaning

## Appendix B

### List of Representative Products

**'317 Patent:** The ZMax 2 with pre-installed AT&T Navigator is representative of the following '317 Accused Products: AT&T ZTE 331, Compel, Maven 2 (6349A), ZMAX 2 Z958, Maven Z812 / Overture 2, Merit Z990G / Z990, Z667, and Z998

**'794 Patent:** The ZMax 2 is representative of the following '794 Accused Products: Axon / Axon A1, Axon 7 / Axon 7 Mini, Axon Pro, ZMAX 2 Z955L, ZMAX 2 Z958, ZMAX PRO, Axon M, Maven 3, Max Duo LTE Z963VL-Z962BL, and ZMAX Grand LTE

**'193 Patent:** The ZMax 2 is representative of the following '193 Accused Products: Avid 828 / Midnight Pro LTE, Blade V8 Pro, Compel, Grand X 4, Imperial II, Lever LTE, Maven 2 (6349A), Prelude, Sonata 3, Warp 7, Warp Elite Z9518, Zinger, Axon / Axon A1, Axon 7 / Axon 7 Mini, Axon Max, Axon Pro, Fanfare, Fanfare 2, Anthem 4G N910, Blade Force, Director N850L, Engage LT N8000, Flash N9500, Force N9100, Fury N850, Grand S Pro N9835, Imperial N9101, Max XL, Nubia Z5 NX501, Prestige 2, Prestige N9132, Reef N810, Render N859, Speed N9130, Supreme N8910 / Vital N9810, Tempo X, Warp N860, Warp Sync N9515, Concord V768, Engage V8000 / Nova 4 V8000, Grand S V988, Groove X501, Score M X500M / Score X500, ZMAX 2 Z955L, ZMAX 2 Z958, ZMAX PRO, Atrium Z793C, Avid Plus Z828, Axon M, Blade Max 3, Blade Spark, Blade Vantage, Blade X, Blade X Max, Blade ZMAX, Concord II Z730, Fanfare 3, Grand X Max 2 Z988, Grand X Max Z787, Grand X3 Z959, Jasper LTE, Majesty Pro LTE, Majesty Z796C, Maven 3, Maven Z812 / Overture 2, Max Blue LTE, Max Duo LTE Z963VL-Z962BL, Merit Z990G / Z990, Obsidian Z820, Overture 3, Overture Z995, Paragon Z753G, Sonata 2 Z755, Quartz Z797C, Rapido LTE Z932L, Savvy Z750C, Sonata Z740G, Unico LTE Z930L, Whirl Z660c, Z667, Z998, Zephyr Z752C, ZFive 2 LTE, ZFive L LTE, ZMAX Champ LTE, ZMAX Grand LTE, Zmax Z790, Optik V55, and Trek 2 (6461A).

**'491 Patent:** The ZMax 2 is representative of the following '491 Accused Products: Avid 828 / Midnight Pro LTE, Blade V8 Pro, Boost Max, Boost Max+, Compel, Grand X 4, Imperial II, Lever LTE, Maven 2 (6349A), Sonata 3, Warp 7, Warp Elite Z9518, Axon / Axon A1, Axon Max, Axon Pro, Fanfare 2, Anthem 4G N910, Blade Force, Director N850L, Engage LT N8000, Flash N9500, Force N9100, Fury N850, Grand S Pro N9835, Imperial N9101, Max XL, Nubia Z5 NX501, Prestige 2, Prestige N9132, Source N9511, Supreme N8910 / Vital N9810, Tempo X, Warp Sync N9515, Z9, Z9 Max, Z9 Mini, Engage V8000 / Nova 4 V8000, Grand S V988, Groove X501, ZMAX PRO, Avid Plus Z828, Axon M, Blade Max 3, Blade Spark, Blade Vantage, Blade X, Blade X Max, Blade ZMAX, Citrine LTE Z716BL, Fanfare 3, Grand X Max 2 Z988, Grand X Max Z787, Grand X3 Z959, Jasper LTE, Majesty Pro LTE, Maven 3, Maven Z812 / Overture 2, Max Blue LTE, Max Duo LTE Z963VL-Z962BL, Merit Z990G / Z990, Obsidian Z820, Overture 3, Overture Z995, Paragon Z753G, Sonata 2 Z755, Rapido LTE Z932L, Solar Z795g, Sonata Z740G, Unico LTE Z930L, Zephyr Z752C, ZFive 2 LTE, ZFive L LTE, ZMAX Champ LTE, ZMAX Grand LTE, and Optik V55.

**'695 Patent:** The ZMax 2 is representative of the following '695 Accused Products: Avid 828 / Midnight Pro LTE, Blade V8 Pro, Boost Max, Boost Max+, Compel, Grand X 4, Imperial II, Lever LTE, Maven 2 (6349A), Sonata 3, Warp 7, Warp Elite Z9518, Axon / Axon A1, Axon Max, Axon Pro, Fanfare 2, Anthem 4G N910, Blade Force, Director N850L, Engage LT N8000, Flash N9500, Force N9100, Fury N850, Grand S Pro N9835, Imperial N9101, Max XL, Nubia Z5 NX501, Prestige 2, Prestige N9132, Source N9511, Supreme N8910 / Vital N9810, Tempo X, Warp Sync N9515, Engage V8000 / Nova 4 V8000, Grand S V988, Groove X501, ZMAX PRO, Avid Plus Z828, Axon M, Blade Max 3, Blade Spark, Blade Vantage, Blade X, Blade X Max, Blade ZMAX, Citrine LTE Z716BL, Fanfare 3, Grand X Max 2 Z988, Grand X Max Z787, Grand X3 Z959, Jasper LTE, Majesty Pro LTE, Maven 3, Maven Z812 / Overture 2, Max Blue LTE, Max Duo LTE Z963VL-Z962BL, Merit Z990G / Z990, Obsidian Z820, Overture 3, Overture Z995, Paragon Z753G, Sonata 2 Z755, Rapido LTE Z932L, Solar Z795g, Sonata Z740G, Unico LTE Z930L, Zephyr Z752C, ZFive 2 LTE, ZFive L LTE, ZMAX Champ LTE, ZMAX Grand LTE, and Optik V55.

**'493 Patent:** The Max Duo LTE is representative of the '493 Accused Products, except for the Axon 7: Avid 828 / Midnight Pro LTE, Blade V8 Pro, Grand X 4, Sonata 3, Warp 7, Warp Elite Z9518, Axon / Axon A1, Axon Max, Axon Pro, Fanfare 2, X6, Axon M, Blade Max 3, Blade Spark, Blade Vantage, Blade X, Blade X Max, Blade ZMAX, Fanfare 3, Grand X Max 2 Z988, Jasper LTE, Majesty Pro LTE, Maven 3, Max Blue LTE, Max Duo LTE Z963VL-Z962BL, Overture 3, ZFive 2 LTE, ZFive L LTE, ZMAX Champ LTE, and ZMAX Grand LTE.

**'729 Patent:** The Max Duo LTE is representative of the '729 Accused Products, except for the Axon 7: Avid 828 / Midnight Pro LTE, Blade V8 Pro, Grand X 4, Sonata 3, Warp 7, Warp Elite Z9518, Axon / Axon A1, Axon Max, Axon Pro, Fanfare 2, X6, Axon M, Blade Max 3, Blade Spark, Blade Vantage, Blade X, Blade X Max, Blade ZMAX, Fanfare 3, Grand X Max 2 Z988, Jasper LTE, Majesty Pro LTE, Maven 3, Max Blue LTE, Max Duo LTE Z963VL-Z962BL, Overture 3, ZFive 2 LTE, ZFive L LTE, ZMAX Champ LTE, and ZMAX Grand LTE.